Statement from the tenth Climate Outlook Forum for the Greater Horn of Africa
26-28 August 2002, Nairobi, Kenya

Summary

There is increased likelihood of near-normal to below-normal rainfall over much of Tanzania, much of Kenya, southern Ethiopia, southern and northern Somalia and parts of southern Sudan. Enhanced probabilities of above normal rainfall favour the rest of Somalia for the period September to December 2002. However, probabilities are favouring normal to above-normal rainfall over parts of southern and northwestern Tanzania, Burundi, Rwanda, Uganda, southwestern Kenya and extreme southern, parts of central and northeastern Sudan as well as parts of central Ethiopia and eastern Djibouti. It is recalled that some of these areas have experienced drought conditions for the past several seasons. Below normal rainfall conditions are again, more likely for some of these areas. The impacts of the accumulated rainfall deficits may therefore be further exacerbated. It should also be noted that heavy and short duration episodic events are common even in below normal rainfall conditions.

The outlook is relevant only for seasonal time scales and relatively large areas. Local and month-to-month variations may occur. Forecast model outputs indicate that there is a high likelihood for a weak to moderate El Niño to persist through the forecast period. Generally, the Sea Surface temperature anomalies over most of the tropical Atlantic and Indian oceans are weak. However, warmer than normal sea surface temperatures have been observed over equatorial eastern Indian Ocean. Any westward spread of these anomalies and / or occurrence of a tropical cyclone may influence the rainfall patterns in the sub region.

Update forecasts are provided by the National weather services and the DMCN. The users are therefore strongly advised to keep in contact with their National Meteorological Services for interpretation of this outlook, finer details, updates and additional guidance.

The Climate Outlook Forum

From 26 to 28 August 2002, the tenth Climate Outlook Forum was convened in Nairobi, Kenya by the Drought Monitoring Centre, Nairobi (DMCN) to formulate consensus guidance for the September to December 2002 rainfall season in the eastern Africa sub region comprising of Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, Sudan, Tanzania and Uganda (sometimes referred to as the Greater Horn of Africa), Users from disaster management, water resources, health, livestock, media and agriculture, among other sectors were active participants in the forum. They helped to develop the outlook and assisted in identifying the implications for the respective countries and sectors. The forum reviewed the state of the global climate system and its implications for the sub-region. Among the principal factors taken into account were the observed and predicted SSTs in the tropical Pacific Ocean and over much of the tropical Atlantic and Indian Oceans as well as the evolving weak to moderate El Niño conditions.

Methodology

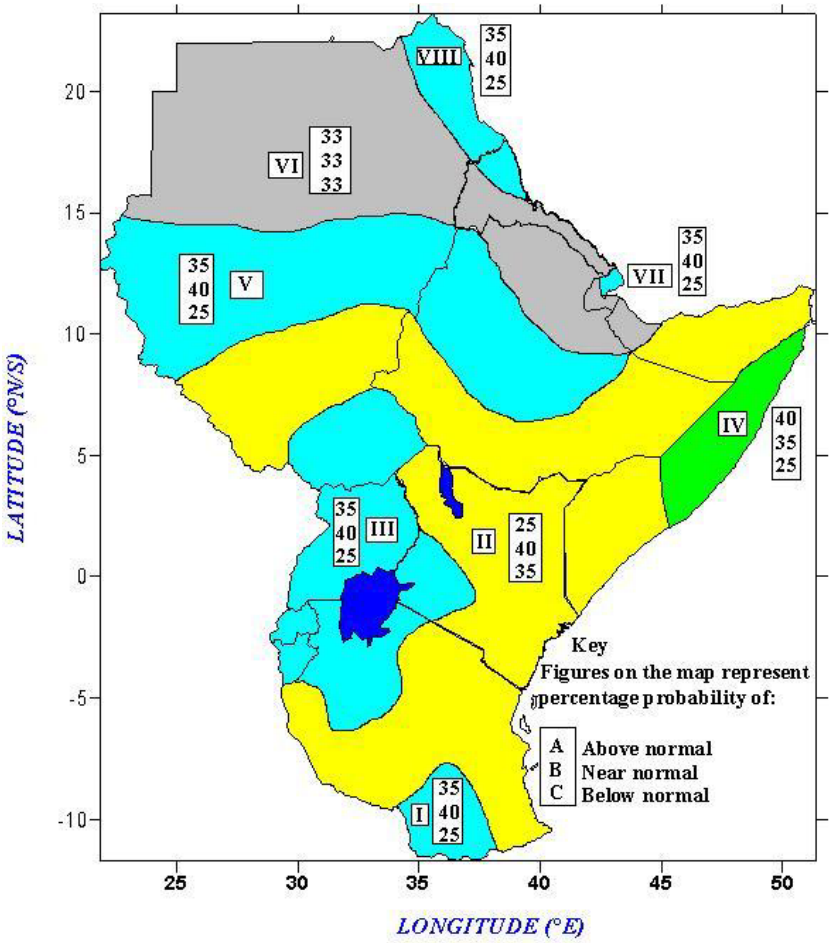
The forum examined the current and expected SST anomalies over the Pacific Ocean as well as the Indian and Atlantic Oceans together with other factors that affect the climate of the sub region. These factors were assessed using coupled ocean-atmosphere models, statistical models and expert interpretation. The current status of seasonal to inter-annual forecasting

allows prediction of spatial and temporal averages and may not fully account for the physical and dynamical factors that influence regional and national climate variability.

The experts established probability distributions to indicate the likelihood of above-, near-, or below-normal rainfall for each zone (see Map). Above-normal rainfall is defined as within the wettest third of recorded rainfall amounts in each zone; near-normal is defined as the third of the recorded rainfall amounts centred around the climatological median; below-normal rainfall as within the driest third of the rainfall amounts. Climatology refers to a situation where any of the three categories have equal chances of occurring.

Outlook

September to December constitutes an important rainfall season over the equatorial parts of the Greater Horn of Africa sub-region. The rainfall outlook for each zone within this sub-region is given below.



Greater Horn of Africa consensus climate outllook for September to December 2002

Zone I: Increased likelihood of near normal to above normal rainfall over parts of southern Tanzania.

Zone II: Increased likelihood of near to below-normal rainfall over western, central and eastern parts of Tanzania, much of Kenya, southern Ethiopia, southern and northern Somalia and parts of southern Sudan.

Zone III: Increased likelihood of near to above-normal rainfall over northwestern Tanzania, Burundi, Rwanda, Uganda, southwestern Kenya and extreme southern Sudan., parts of central and northeastern Sudan as well as parts of central Ethiopia and eastern Djibouti.

Zone IV: Increased likelihood of above to near-normal rainfall over central Somalia.

Zone V: Increased likelihood of near to above-normal rainfall over parts of central and northeastern Sudan as well as parts of central Ethiopia. and eastern Djibouti.

Zone VI: Climatology is suggested over northern Sudan, northeastern Ethiopia, much of Eritrea, western Djibouti and extreme northwestern Somalia.

Zone VII: Increased likelihood of near to above-normal rainfall over eastern Djibouti.
Zone VIII: Increased likelihood of near to above-normal rainfall over northern Eritrea and northeastern Sudan.

Note:

The numbers for each zone indicate the probabilities (chances of occurrence) of rainfall in each of the three categories, above-, near-, and below normal. The top number indicates the probability of rainfall occurring in the above-normal category; the middle number is for the near normal and the bottom number for the below-normal category. For example, in case of southern Tanzania (zone I), there is 35% probability of rainfall occurring in the above normal category; 40% probability of rainfall occurring in the near-normal category; and 25% probability of rainfall occurring in the below normal category. It is emphasized that boundaries between zones should be considered as transition areas.

Contributors

The tenth climate outlook forum for the Greater Horn of Africa was organised jointly by the Drought Monitoring Centre, Nairobi (DMCN), World Meteorological Organisation (WMO) and the International Research Institute for climate prediction (IRI) within the framework of the United States Agency for International Development (USAID) funded project, “Applications of meteorology to the reduction of climate and weather related risks to food security, water resources, and health for sustainable development in the Greater Horn of Africa sub-region”.

Contributors to this consensus climate outlook included representatives of the Meteorological Services from ten GHA countries (Insititut Geographique du Burundi; Meteorologie Nationale de Djibouti; Eritrea Meteorological Services; National Meteorological Services Agency of Ethiopia; Kenya Meteorological Department; Rwanda Meteorological Service; Somalia Republic, Sudan Meteorological Authority; Tanzania Meteorological Agency and Uganda Department of Meteorology) and climate scientists and other experts from national, regional and international institutions and organisations (Drought Monitoring Centre, Nairobi; Drought Monitoring Centre, Harare; IRI; WMO; ACMAD, National Centers for Environmental Prediction/Climate Prediction Center (NCEP/CPC), Moi University, Asian Centre for Disaster Preparedness and UK Met. Office.